



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,582	10/16/2000	Faruk S. Hadziomerovic	NORT-0068	2017
	7590		[12403RRUS01U]	
Ruben S. Bains TROP, PRUNER & HU, P.C. 8554 Katy Freeway, Ste 100 Houston, TX 77024			EXAMINER FERRIS, DERRICK W	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/688,582

Applicant(s)

HADZIOMEROVIC, FARUK S.

Examiner

Derrick W. Ferris

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16-23, 25, 26 and 28-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-14, 16-23, 25, 26, 31, 32, 38 and 39 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 28-30, 33-37 and 40 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. **Claims 1-14, 16-23, 25, 26, 28-40** as amended are still in consideration for this application. Applicant has amended claims **6, 10, 21, 22, 23, 25, 26, 28-33**. Applicant has canceled claims **15, 24, and 27**. Applicant has added claims **35-40**.
2. Applicant is in error since **claim 26** is sill missing the limitations in claim 25 as previously claimed in reference to applicant's remarks on page 12.
3. Examiner **withdraws** the 112-second paragraph rejection(s) for Office action filed **3/22/04**. Examiner thanks applicant for making the necessary corrections to clarify the recited claimed subject matter and thus withdraws the rejection.
4. Examiner **withdraws** the anticipated rejection to *Seid* (and corresponding obviousness rejections) for Office action filed **3/22/04**. In addressing applicant's arguments in the response filed **6/28/04**, upon further reconsideration applicant is correct in that column 4, lines 26-47 may not clearly combining the first data structure with itself. As such, please find a new rejection that teaches the above limitation.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2663

6. **Claims 1-5, 7, 9, 33, and 35-37** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,577,030 to *Oki et al.* ("*Oki*") in view of U.S. Patent No. 5,754,543 to *Seid*.

As such to **claim 1**, *Oki* discloses storing a first data structure containing costs associated with transmitting data between routers in a network is taught by copying the adjacency matrix A to form A' e.g., in step 3 in figure 1. As noted, the adjacency matrix contains cost information based on the adjacent connections of the nodes. The first data structure A' is combined with itself to determine a cost transmitting data if no hop is found during the first iteration, see e.g., step 8 YES. In particular, the first data structure is combined with itself as taught e.g., at column 10, lines 4-5. Also see column 5, lines 41-47.

Oki may be silent or deficient to the further limitation transmitting the data along a route based on the calculated cost.

Seid teaches the further recited limitation above at e.g., in the Background at column 1, lines 10-20.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Oki* by clarifying that the routing method taught by *Oki* is used to route packets based on the calculated cost.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the limitation mentioned above. In particular, the motivation for modifying the reference or to combine the reference teachings would to route the packets using the determined path. In particular, *Seid* cures the above-cited

Art Unit: 2663

deficiency by providing a motivation found at e.g., column 1, lines 10-20 since the routing method is used to route the packets to the destination. Second, there would be a reasonable expectation of success since both references teach routing. Thus the references either in singular or in combination teach the above claim limitation(s).

As to **claims 2-3**, the invention of *Seid* teaches that other data structures can be used that define router interconnections in the network. In particular, *Seid* teaches that routing choices typically have more than one cost, see e.g., column 17, lines 37-53 such that a second data structure is e.g., a connectivity matrix.

As to **claim 4**, the first data structure uses hops which is at least distance.

As to **claim 5**, the algorithm in figure 1 of *Ok*i shows computing a minimal number of hops thus teaching a minimal cost.

As to **claim 7**, see e.g., column 2, lines 49-59 of *Seid* where the connection matrix is determined.

As to **claim 9**, see e.g., column 9, lines 20-40 of *Seid* where the cost matrix is determined in step 1.

As to **claim 33**, see similar rejection to claim 1. Examiner notes both references teach determining a cost for multiple hops. As such it would have been obvious to determine a distancing using more than two hops. As such figure 1 of *Seid* shows more than two hops and *Seid* also teaches using the hop count as a cost value, see e.g., column 2, lines 7-23. *Ok*i also provides further support for multiple hops, see e.g., figure 1.

As to **claim 35**, see e.g., figure 1 of *Ok*i which is iterative.

As to **claim 36**, see e.g., figure 4b on the second iteration.

As to **claim 37**, see e.g., figure 4c on the third iteration.

7. **Claims 8 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,577,030 to *Oki et al.* ("*Oki*") in view of U.S. Patent No. 5,754,543 to *Seid* in further view of "Internet Protocol DARPA Internet Program Protocol Specification" to *Information Sciences Institute*.

As to **claim 8**, *Seid* discloses using a packet in general but is silent or deficient to specifically using an IP packet (see e.g., column 1, lines 9-20). *Oki* also does not mention using IP data packets.

Information Sciences Institute teaches the further recited limitation above at e.g., page 5.

Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to use IP as a packet. In particular, one skilled in the art would have been motivated to using an IP packet for communicating over an IP network where an IP network is a packet network.

As to **claim 34**, see similar rejection for claim 8.

Allowable Subject Matter

8. **Claims 10-14, 16-20, 21-23, 25, 26, 31, 32, 38 and 39** are allowable.

9. **Claims 6** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2663

Conclusion

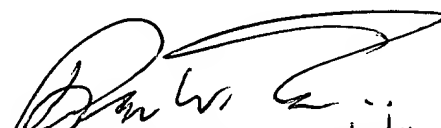
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
Art Unit 2663


DWF


Derrick W. Ferris 12/21/07